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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,477	01/04/2001	Brad A. Armstrong		3561

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EXAMINER	
NGUYEN, KEVIN M	
ART UNIT	**PAPER NUMBER**
2674	8

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/754,477	ARMSTRONG, BRAD A.	
	Examiner	Art Unit	
	Kevin M. Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-7 and 11* is/are allowed.

6)☒ Claim(s) *8-10 and 12-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *01/24/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on 01/21/2004 is entered. The rejections of claims 8-10, 12-31 are maintained. Claims 1-7, 11 are allowed.

Terminal Disclaimer

2. The terminal disclaimer filed on 01/21/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,198,473 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8, 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Levy (US 5,367,631).

As to claim 8, Levy teaches a method of controlling window scrolling using a computer mouse, comprising:

It should be noted that it would be possible to program the mouse so that tilting it in one particular direction would be the functional equivalent of clicking the mouse's select button (col. 3,lines 52-55).

At step 59, the system checks to see if the mouse has been clicked yet. If it has not been clicked, the system returns to step 51. If it has, then, at step 61, the cursor position chosen by the user is stored in the system in relation to the selected tilt register Now, whenever the user tilts the mouse in the selected compass direction, the cursor will automatically jump to the chosen position (col. 3, lines 39-46).

Scrolling through a text document could be done at a linearly varying rate as the mouse incorporating the present invention was tilted through an increasingly large angle (col. 4, lines 19-22).

As to claim 31, Levy teaches it should be noted that it would be possible to program the mouse so that tilting it in one particular direction would be the functional equivalent of clicking the mouse's select button (col. 3,lines 52-55).

two On/Off switches (X and Y axis tilt sensors 24, 26, fig. 1);

two pressure-sensitive variable sensors (X and Y axis tilt sensors 24, 26, fig. 1);

scrolling through a text document could be done at a linearly varying rate as the mouse incorporating the present invention was tilted through an increasingly large angle (col. 4, lines 19-22).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 12-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Adan et al (US Patent Application Publication 2002/0054023 A1).

As to claims 12-15, 18, 20, 22, 23, 24-26, 29, 30, Adan et al teaches a computer mouse 101 (Fig. 2A) associated with a method, the computer mouse comprising:

a housing (102, 103), a trackball 119 (Fig. 2B), a rocker button 200 (see figure 2A, 2B, page 2, paragraph [0028, 0029]), communicating a first command signal to software, a display screen 560 (Fig. 6A), a window 562 (Fig. 6A), Internet Explorer®, (see page 6, paragraph [0081]), said first command signal activating display of information of a previous page 570 (Fig. 6B), said activating occurring without a requirement of a cursor having to be located on a back button 566 (Fig. 6A) on a display 560 (see figures 6A, 6B, page 6, paragraph [0083], [0085]).

As to claims 16, 17, 19, 21, 27, 28, Adan et al teaches said second command signal activating display of information of a forward page 576 (Fig. 6A), said activating occurring without a requirement of a cursor having to be located on a back button 566 (Fig. 6A) on a display 560 (see figures 6A, 6C, page 7, paragraph [0083], [0087]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levy in view of Adan et al (US Patent Application Publication 2002/0054023 A1).

As to claim 9, Levy teaches all of the claimed limitations of claim 8, except for said pointer controlled by said mouse is not required to be located on a scrolling elevator showing on a monitor.

Adan teaches under an embodiment present invention, the user simply has to press and release button 200 of mouse 101 so that switch 228 is depressed while window 562 is the focus window of screen display 560. It does not matter where the cursor is currently positioned when window button 200 is depressed and released (paragraph [0081]).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify each Levy's cursor controlled by a mouse including it does not matter where the cursor is currently positioned when window button 200 is depressed and released, in view of the teaching in the Adan's reference because this would improve the quality of the window scrolling being controlled faster.

As to claim 10, Levy teaches maximum force is generated as the tilt is 90^0 (col. 3, lines 7-8). It is also possible to use the present invention in an analog rather than digital fashion. For example, the magneto-transistors which comprise the X- and Y-axis sensors in the first preferred embodiment, are extremely sensitive. Typically, they can provide tilt resolution of 1/3 of 1^0, when the data output comprises 8 bits. Given this resolution, variable rate analog scrolling can be easily incorporated into the present invention. Therefore, it is obvious to provide decreasing scrolling rate because of they can provide tilt resolution of $1/3^0$.

Allowable Subject Matter

6. Claims 1-7, 11 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

at least two of said sensors each capable of providing at least three readable states of varied conductance, at least two states of said at least three readable states dependant upon depressive pressure applied to the variable-conductance sensors through depression of an associated button; wherein the improvement comprises: said electronic circuitry including means for reading said at least three readable states and for producing a distinct control signal for each state of said at least two states, the distinct control signals are screen scrolling control signals used to determine scrolling speed rates.

Response to Arguments

8. Applicant's arguments filed 01/21/2004 have been fully considered but they are not persuasive.

In response to applicant's argument at paragraph 4, 6, page 2, and page 6. This argument is not persuasive because of the rejections in paragraphs 3, 4, 5 above.

In response to applicant's argument at paragraph 5, page 5. This argument is not persuasive because continuation of application No. 09/153,146 associated with the Pub. No. US 2002/0054023 filed under 37 CFR 1.53 (b). It is a duplicate specification (exact copy) of the specification filed on parent case 09/153,148. Therefore, the Adan et al 10/004,663 reference is deemed to be entitled to the priority date of 09/14/1998 and is

properly applicable as prior art. Therefore, the prior art rejection is hereby repeated 102(e) above.

For these reasons, the rejections based on Levy and Adan et al have been maintained.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KN
April 16, 2004

XIAO WU
PRIMARY EXAMINER